

CHAPTER 6

RIGGING M151 TRUCK WITH M36 RADAR

CHRONOGRAPH SET

6-1. General

Procedures for rigging the M36 radar chronograph set in the M151, ¼-ton truck for airdrop on a modular platform are outlined in this chapter. Procedures for rigging the utility truck on this platform will be the same as shown in chapter 2 with the exceptions noted.

6-2. Description of Load

The M36 radar chronograph set (fig 6-1) mounted in the M151 truck is rigged on an 8-foot modular platform with one G-11A cargo parachute and other items of airdrop equipment. This set consists of radar chronograph (complete radar transmitter-receiver), radar chronograph mount, telescope M90F, tripod assembly, cable and reel assembly, microphone, radar test receiver, instrument light, installation bracket (jeep mounting), and repair parts kit. The unrigged truck with radar chronograph set weighs 2,792 pounds. It is 133 inches long, 64 inches wide, and 71 inches high, reducible to 52 inches.

6-3. Modifying Truck

Modify truck and install bracket (jeep mounting) in bed of truck as shown in figure 6-2.

6-4. Preparing Truck

Prepare truck according to procedures outlined in chapter 2 with the exception that the rear seat, assistant driver's seat, top cover, and side curtain will not be dropped.

6-5. Stowing Radar Chronograph Set

a. Stowing Auxiliary Feet. Position the three auxiliary feet in the bed of the truck (fig 6-2). Position a 3- by 36- by 36-inch piece of honeycomb on top of the auxiliary feet as shown in figure 6-3.

b. Positioning Honeycomb and Plywood in Truck. Position two ¾- by 12- by 18-inch layers of plywood and two ¾- by 7- by 21-inch layers of plywood around battery box as shown in figure 6-3. Position one 3- by 12- by 18-inch layer of

honeycomb and one 3- by 7- by 21-inch layer of honeycomb as shown in figure 6-4. Position one 3- by 24- by 29-inch piece of honeycomb on top of this plywood and honeycomb as shown in figure 6-5. Position one 3- by 14- by 18-inch piece of honeycomb and two 3- by 6- by 18-inch pieces of honeycomb on the floor of the passenger's side (fig 6-4 and 6-5). Place four ½- by 15- by 19-inch layers of felt on the honeycomb in bed of truck as shown in figure 6-5.

c. Stowing Components. Position radar test receiver, telescope, and chronograph automatic reliability rater on passenger's side (fig 6-6). Position the microphone, instrument light, and cable on top of these components (fig 6-7). Cover with a 3- by 18- by 24-inch piece of honeycomb as shown in figure 6-8.

d. Stowing Tripod. Position tripod in rear of vehicle with a 3- by 12- by 18-inch piece of honeycomb between bracket and tripod (fig 6-9). Secure tripod with type III nylon cord to rear frame of driver's seat and to footman loop on rear of vehicle.

e. Stowing Generator. Center generator in rear of vehicle over the four layers of felt, and secure it with a 15-foot tiedown strap around vehicle as shown in figure 6-10. Using type III nylon cord, make ties from corners of generator of footman loops on truck (fig 6-10).

f. Stowing Radar Chronograph. Position radar chronograph on honeycomb on passenger's side. Secure with a 15-foot tiedown strap around truck and radar chronograph as shown in figure 6-11. Using type III nylon cord, make ties from handles to footman loops and from footman loop over base of chronograph back to footman loop (fig 6-11).

6-6. Marking Rigged Load

Mark the rigged load in accordance with FM 10-500/TO 13C7-1-5. The rigged load weighs 3,480 pounds. It is 72 inches high, 108 inches wide, and 134 inches long with a 24-inch overhang at the front of the platform and a 14-inch overhang at the rear of the platform. The center



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Figure 6-1. Components of M36 radar chronograph set.

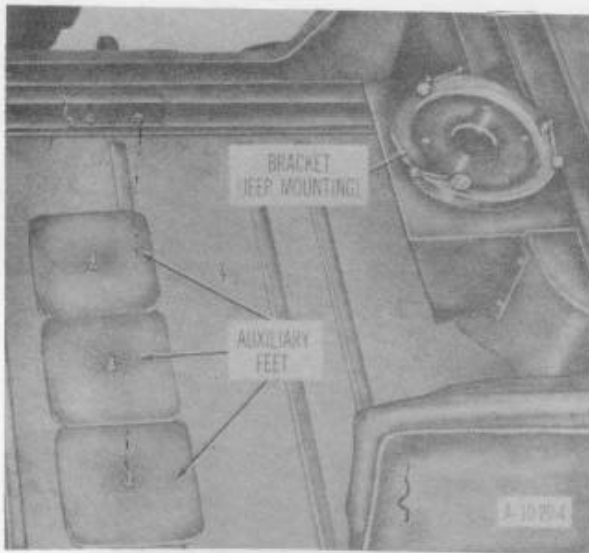


Figure 6-2. Radar chronograph installation bracket (jeep mounting) installed in truck.

of gravity is 56 inches from the front edge of platform. If the load varies, the height, weight, center of gravity, and parachute requirements must be computed.

Note. When rigging this load for airdrop on a drop zone with ground elevation of 6,000 to 10,000 feet, add 3 inches to the height.

6-7. Equipment Required

The equipment required for rigging the basic load will be the same as shown in table 2-1. The equipment required for stowing the M36 radar chronograph set in the M151, ¼-ton utility truck is listed in table 6-1.

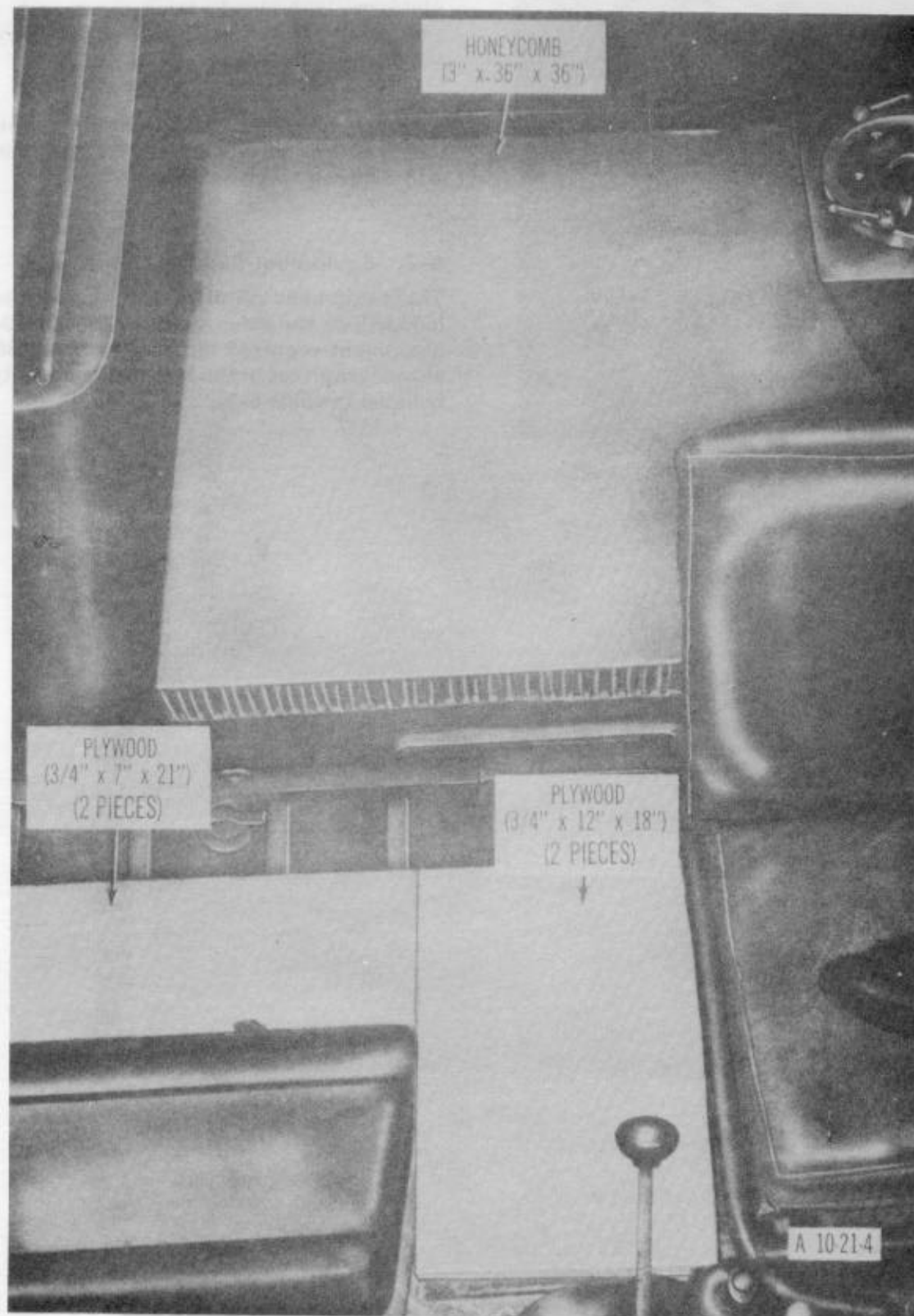


Figure 6-3. Honeycomb positioned over auxiliary feet in bed of truck and plywood positioned around battery box.

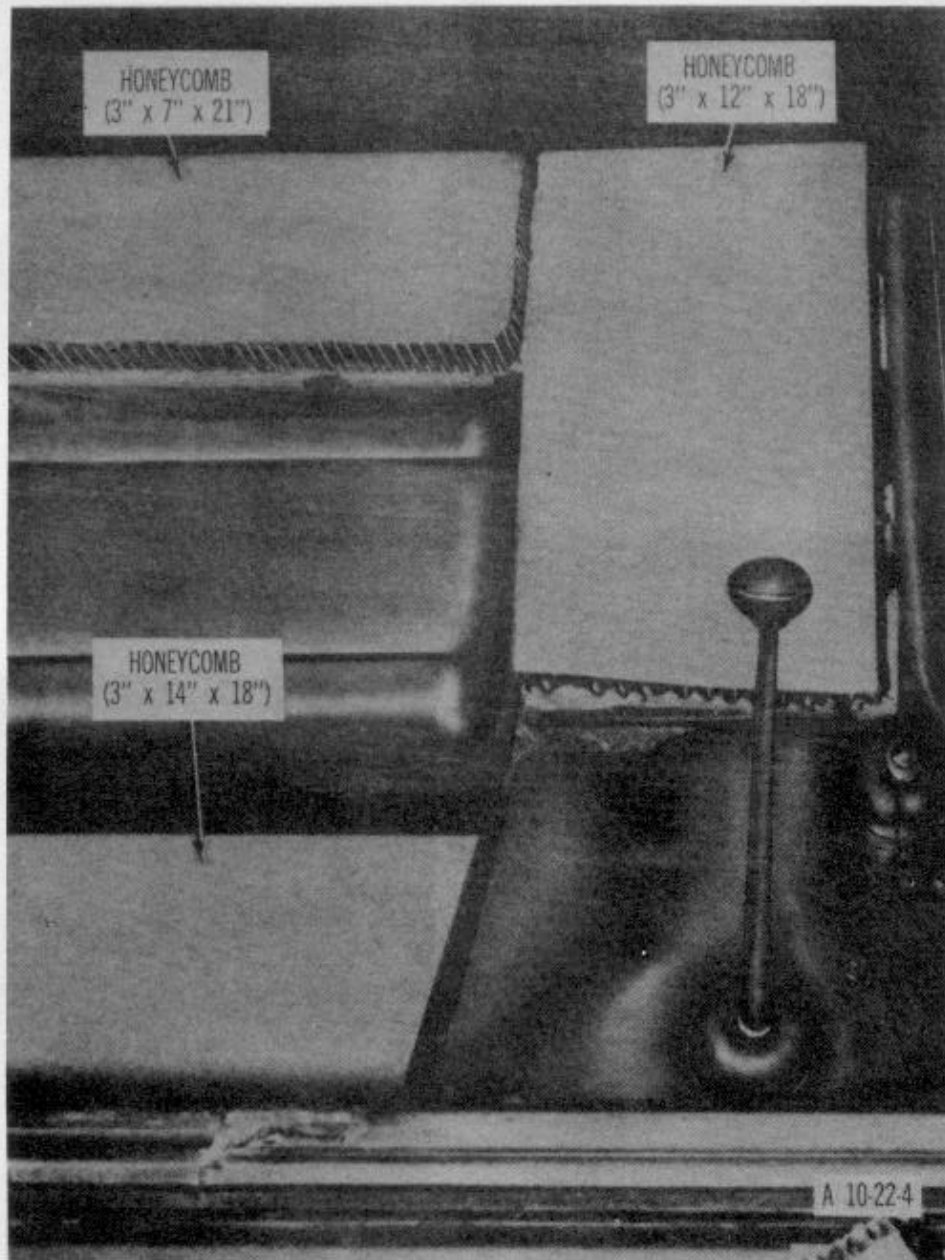


Figure 6-4. Honeycomb positioned on top of plywood and in floor on the passenger's side of truck.

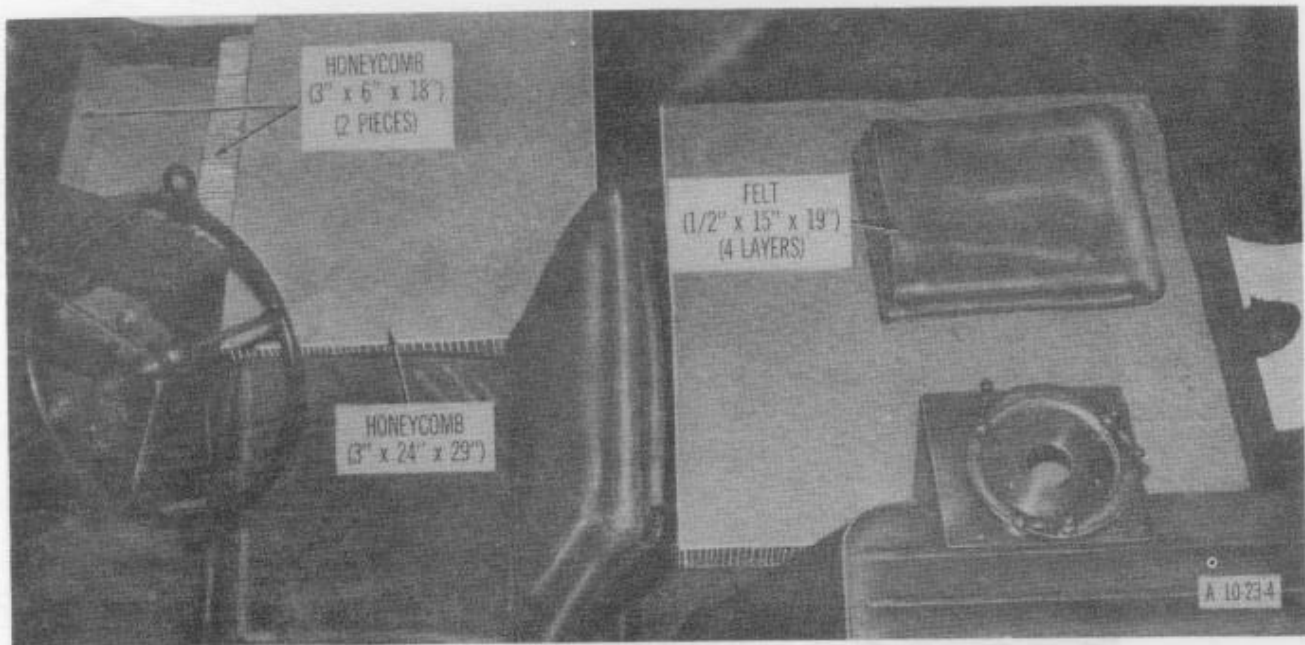


Figure 6-5. Honeycomb positioned on top of battery box and felt positioned on honeycomb in bed of truck.

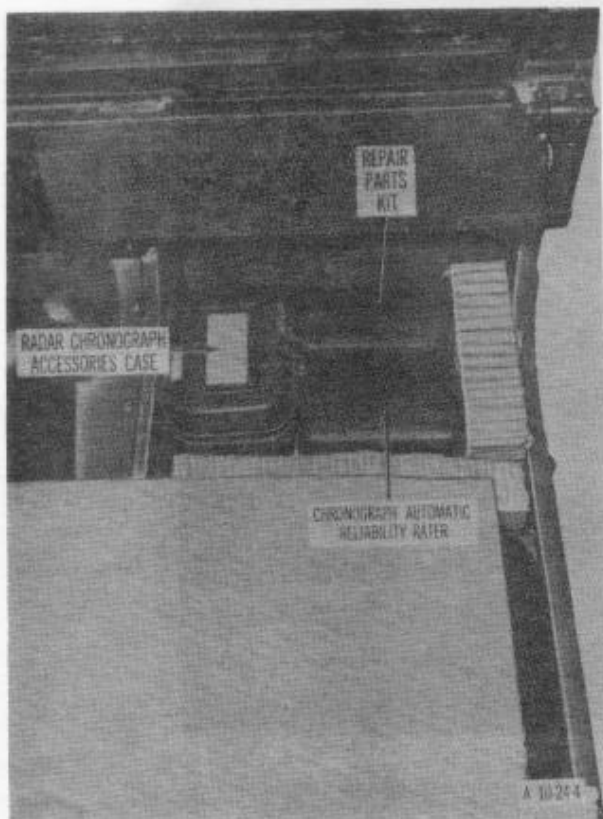


Figure 6-6. Radar test receiver, telescope, and chronograph automatic reliability rater stowed.

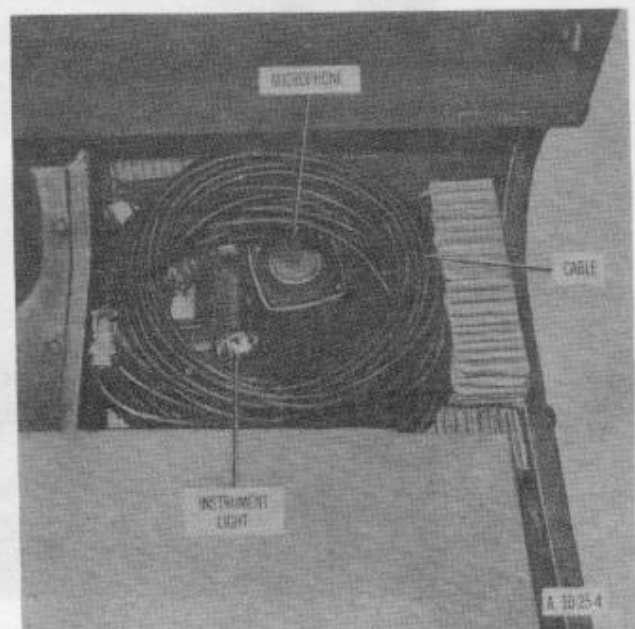


Figure 6-7. Microphone, instrument light, and cable stowed.

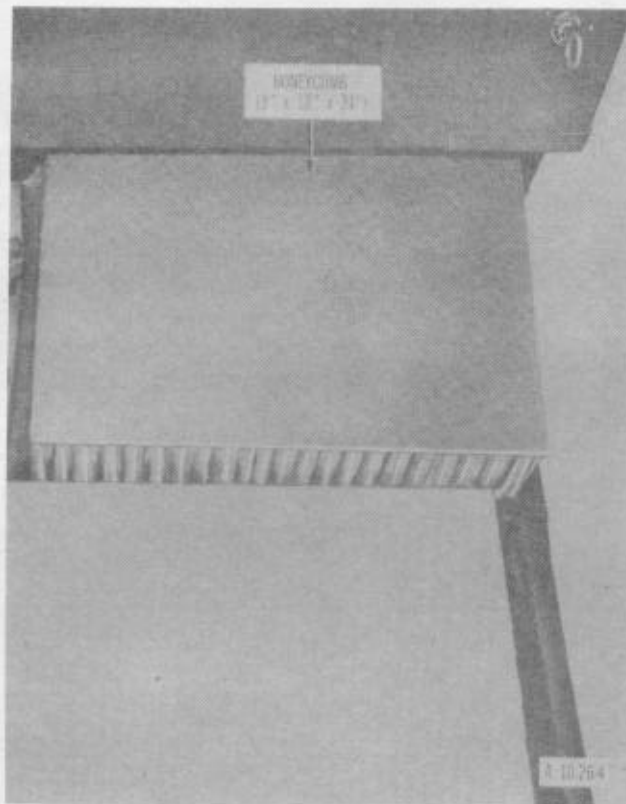


Figure 6-8. Honeycomb positioned over components.

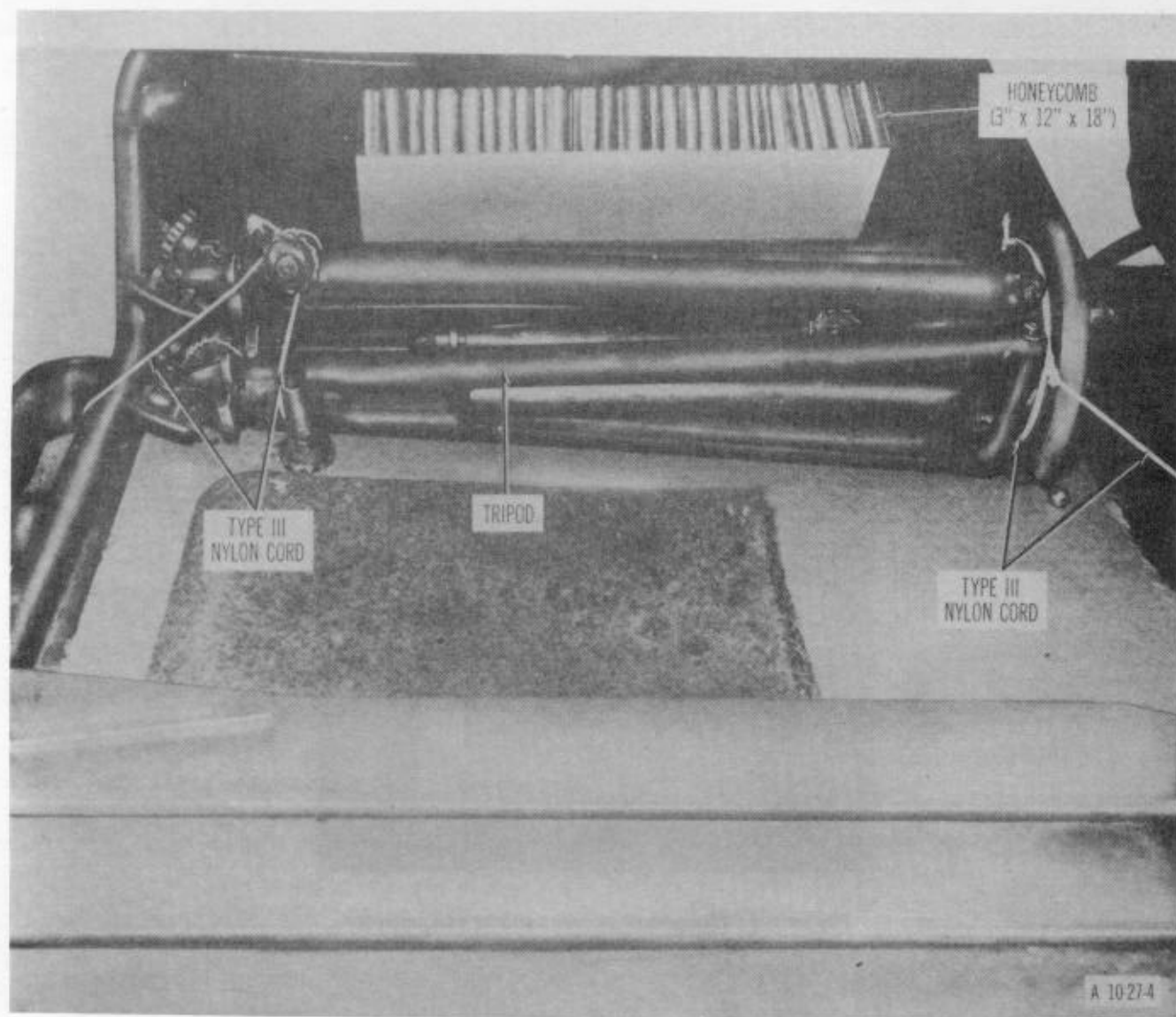


Figure 6-9. Tripod stowed.

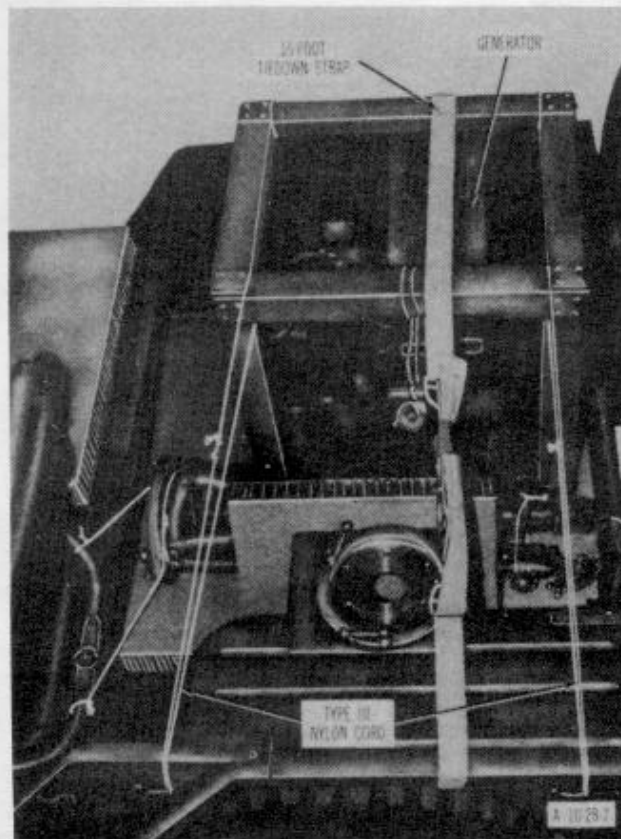


Figure 6-10. Generator stowed.

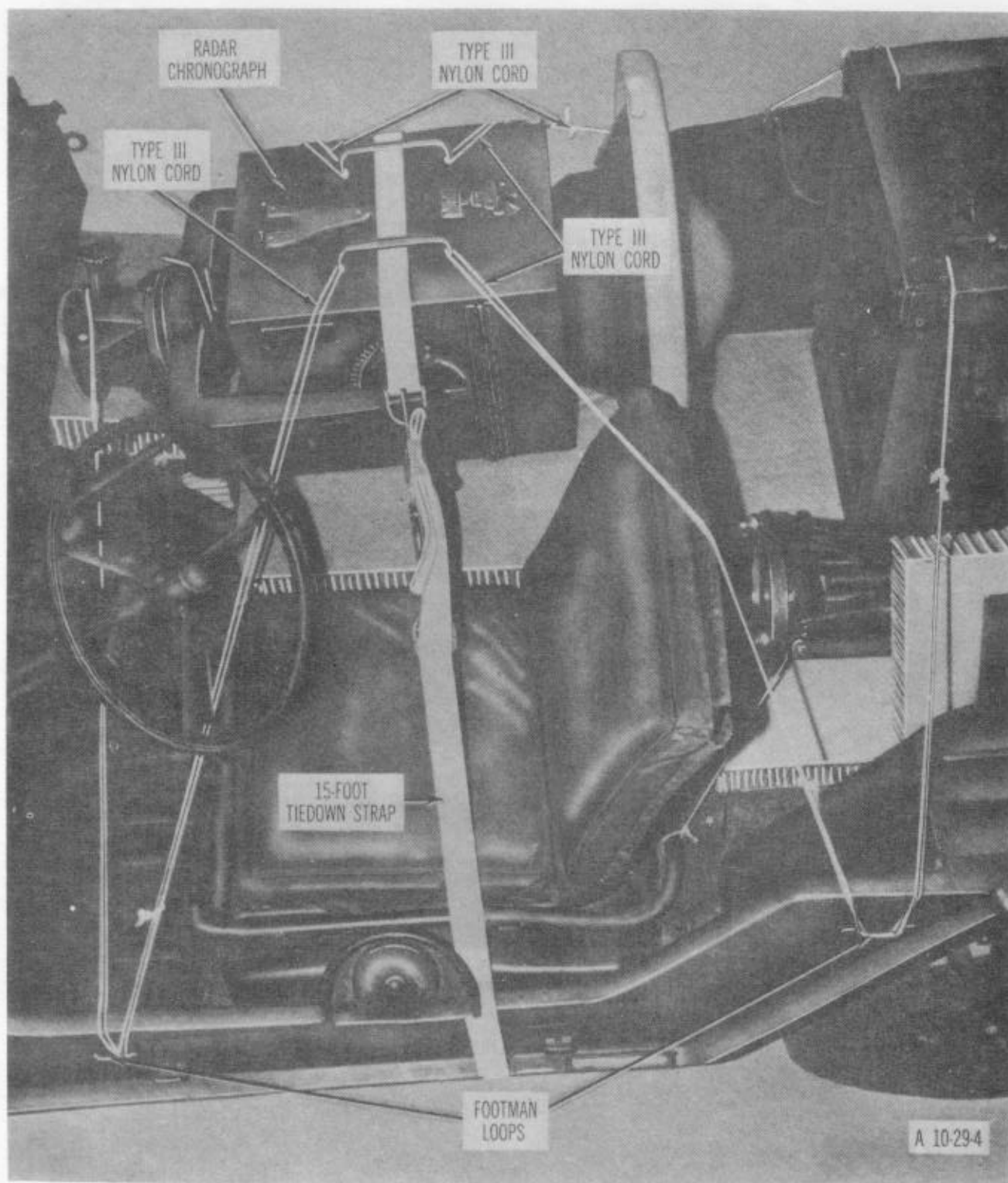


Figure 6-11. Radar chronograph stowed.

Table 6-1. Equipment Required.

National Stock No.	Item	Quantity
8305-00-958-3685	Felt Sheet, ½- by 15- by 19-in	4
1670-00-753-3928	Pad, energy dissipating, honeycomb, 3- by 36- by 96-inch:	2 sheets
	3- by 6- by 18-in	(2)
	3- by 7- by 21-in	(1)
	3- by 12- by 18-in	(2)
	3- by 14- by 18-in	(1)
	3- by 18- by 24-in	(1)
	3- by 24- by 29-in	(1)
	3- by 36- by 36-in	(1)
5530-00-128-4981	Plywood:	
	¾- by 7- by 21-in	2
	¾- by 12- by 18-in	2
1670-00-937-0271	*Tiedown Assembly, 15-ft (Dacron)	2
*When this item is not available, the following replacement items are required:		
3990-00-360-0248	Binder, load	2
1670-00-360-0340	Fastener, strap, cargo tiedown, quick-fit	2
1670-00-360-0540	Strap, tiedown, 15-ft	2